CLAIMS

1. A production method of a functional group-terminated vinyl polymer comprising

a step of synthesizing a halogen atom-terminated vinyl polymer by the radical polymerization reaction of a vinyl monomer in the presence of a halogen compound and

a step of introducing a functional group to a terminus by substituting a functional group-containing group for the terminal halogen atom of said vinyl polymer,

said halogen compound having a structure such that said halogen atom is bound to a carbon atom linked to an aromatic ring and

said radical polymerization reaction being carried out either by light irradiation or light irradiation in the presence of a Group 14 to 16 metal compound or by heating in the presence of a Group 14 to 16 metal compound.

2. The production method of a functional group-terminated vinyl polymer according to Claim 1,

wherein the halogen compound has two or more halogen atoms.

3. A production method of a functional group-terminated vinyl polymer comprising

a step of synthesizing an iodine atom-terminated vinyl polymer by the radical polymerization reaction of a vinyl monomer in the presence of an iodine compound and

a step of introducing a functional group to the terminus by substituting a functional group-containing group for the terminal iodine atom of said vinyl polymer,

said iodine compound having a structure such that said iodine atom is bound to a carbon atom linked to an aromatic ring and

said radical polymerization reaction being carried out either by heating or by heating in the presence of a radical

polymerization initiator.

4. The production method of a functional group-terminated vinyl polymer according to Claim 3, wherein the iodine compound has two or more iodine atoms.

5. The production method of a functional group-terminated vinyl polymer according to Claim 1, 2, 3 or 4, wherein the functional group to be introduced into a terminus is one or more functional groups selected from the group consisting of hydroxyl, amino, carboxyl, vinyl and silyl groups.

6. A functional group-terminated vinyl polymer as obtainable by the production method according to Claim 1, 2, 3, 4 or 5, which has a number average molecular weight of 500 to 50,000 and a terminal functional group introduction rate of not less than 90%.